a neutral color processing circuit for processing the black object-oriented image data, the grey object-oriented image data, and the white object-oriented image data, whereby the image object's neutral object-oriented image data is processed separately from the object's non-neutral object-oriented image data.

4. (Thrice Amended) A method for processing object oriented image data, wherein object-oriented image data comprises image data pertaining to an image object,, comprising:

(a) parsing the object oriented image data into non-neutral object-oriented image data and object-oriented neutral image data;

(b) parsing the neutral object-oriented image data into black object-oriented image data, grey object-oriented image data, and object-oriented white image data;

(c) processing the black object-oriented image data, the object-oriented grey image data, and the white object-oriented image data separately from the non-neutral object-oriented image data; and

(d) processing the processed object-oriented black image data, the processed object-oriented grey image data, the processed object-oriented white image data, and the non-neutral object-oriented image data together.

REMARKS

Reconsideration of this application is respectfully requested. Claims 1-5, 8 and 9 are pending in the present application. Claims 1 and 4 have been amended. Claims 6, 7 and 10 have been canceled.

Claims 1-10 were rejected under 35 USC 112, first paragraph, as containing subject matter which was not described in the specification. The Examiner stated that the terms non-neutral object oriented image data, black object oriented image data, grey object oriented image data and white object oriented image data were not described in the application and that it is unclear whether the non-neutral object oriented image data, black object oriented image data, grey object oriented image data and white object oriented image data are referring to image data that is created by using object oriented programming or that the image data would be processed according to a particular object. Applicants respectfully disagree.

Applicants believe it is clear that the non-neutral object oriented image data, black object oriented image data, grey object oriented image data and white object oriented image data refer to those specific portions (i.e., non neutral, black, grey or white) of the image data that is created by using object oriented programming. Applicants invention as claimed is directed to a system (and method) of processing object-oriented image data. Applicants' system includes "a first parser circuit for parsing the object-oriented image data into non-neutral object-oriented image data and neutral object-oriented image data." Applicants believe this language is clear in that the first parser takes the object-oriented image data and parses it into non-neutral and neutral components (non-neutral object-oriented image data and neutral object-oriented image data, respectively).

Applicants system further includes "a second parser circuit for parsing the neutral object-oriented image data into black object-oriented image data, grey object-oriented image data, and white object-oriented image data." Applicants believe this language is clear in that the second parser takes the neutral object-oriented image data (i.e., the neutral component of the original object-oriented image data) and parses it into the black, grey and white components (i.e., black object-oriented image data, grey object-oriented image data, and white object-oriented image data).

Applicants believe the specification supports the language of the claims as presently written. Applicants amended the claims in their last response, by changing for example "non neutral image data" to "non-neutral object-oriented image data" to clarify that the system and method of the invention as claimed was for processing object-oriented image data.

Claims 1-10 were rejected under 35 USC 112, second paragraph, as being indefinite. The Examiner states that the phrase "may be" in claims 1, 4 and 6 is considered vague and indefinite. Claims 1 and 4 have been amended to remove this phrase. Claims 1-5, 8 and 9 are considered definite.

Claims 1, 3-5, 7-9 were rejected under 35 USC 103(a) as being unpatentable over Ueda et al. and Matsunawa. The Examiner stated that Ueda et al. discloses a first parser circuit (program step, fig. 3, of CPU 12, abstract) for parsing object-oriented graphic/text image data into non-neutral object-oriented text image data (text, fig. 16a) and neutral object-oriented graphic image data; (photographic and graphics image, fig. 16a); whereby the object's neutral object-oriented

graphic image data is processed separately (column 26, lines 1-6, an image element is retrieved and processed by CPU 12) and may be rendered differently (see the images are printed differently according to a printing characteristic, fig. 19b) from the object's non-neutral object-oriented text image data. The Examiner stated that Ueda et al also teaches that the neutral image object oriented graphic image data are to be processed by a binarization process (column 26, lines 20-25, column 8, lines 8-10) in the rendering transform means, and that the processed neutral object oriented graphic image data and the non neutral object oriented text image are further processed. Ueda et al. does not teach a second parser circuit for parsing the neutral object-oriented graphic image data into black object-oriented image data, grey object-oriented image data, and white object-oriented image data; and a neutral color processing circuit for processing the black object-oriented image data, grey object-oriented image data, and white object-oriented image data. The Examiner stated that Matsunawa, in the same area of converting a multi-gradation image into a binary image (fig. 1b Matsunawa and column. 8, lines 5-10 Ueda) teaches to use a parser circuit (11, fig. 18, column 13, lines 20-27) to parse the multi-gradation image into black object-oriented image data (see value 16 of fig. 2, fig. 7b), grey object-oriented image data (see value 2-15, fig. 2, fig. 7b), and white object-oriented image data (value 0 of fig. 3a, fig. 7b) and a neutral or processing circuit (14, fig. 18, column 13, lines 25-32) for processing the black object-oriented image data, grey object-oriented image data, and white object-oriented image data (fig. 7) such that a binary image is created.
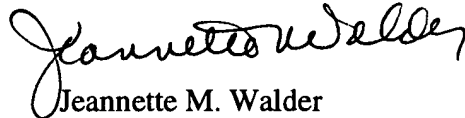
Applicants respectfully disagree. Ueda et al. teaches categorizing image types into a hierarchical structure (column 5, lines 20-36). These types are categorized into three image types: photograph, graphics and text. Each of the three categories is further categorized into additional image types. For example, photograph may be categorized into portrait, landscape and still life. Images in each of these categories may include neutral image data and non neutral image data. Ueda et al. categorize various images into types so that the user may manipulate each one separately using an appropriate software tool. However, Ueda et al. does not teach or suggest "a first parser circuit for parsing the object-oriented image data into non-neutral object-oriented image data and neutral object-oriented image data."

Nothing in Ueda et al. or Matsunawa, whether taken alone or in combination, teaches or suggests "a first parser circuit for parsing the object-oriented image data into non-neutral object-

oriented image data and neutral object-oriented image data" or "a second parser circuit for parsing the neutral object-oriented image data into black object-oriented image data, grey object-oriented image data, and white object-oriented image data". Matsunawa teaches an image processing system and method for restoring a tonal picture from binary image data. Matsuwana does not teach an object-oriented image rendering system. Matsuwana does not teach or suggest a parser circuit for parsing the neutral object-oriented image data into black object-oriented image data, grey object-oriented image data, and white object-oriented image data. All neutral image data in Matsuwana is processed in the same manner, regardless of the type of object that a particular segment of data may pertain. Circuit 11 is a "circuit for converting input image signals into binary signals", not a parser circuit for parsing neutral object-oriented image data into black object-oriented image data, grey object-oriented image data, and white object-oriented image data.

Reconsideration of this application and allowance thereof are earnestly solicited. In the event the Examiner considers a personal contact advantageous to the disposition of this case, the Examiner is requested to call the undersigned Attorney for Applicants, Jeannette Walder

Respectfully submitted,

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El Segundo, California
Date: August 9, 2001
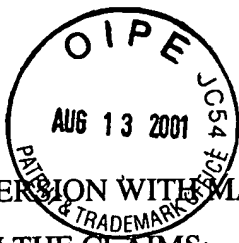
VERSION WITH MARKINGS TO SHOW CHANGES MADE:

IN THE CLAIMS:

1. (Thrice Amended) A system for processing object-oriented image data, wherein object-oriented image data comprises image data pertaining to an image object, comprising:

a first parser circuit for parsing the object-oriented image data into non-neutral object-oriented image data and neutral object-oriented image data;

a second parser circuit for parsing the neutral object-oriented image data into black object-oriented image data, grey object-oriented image data, and white object-oriented image data; and

· a neutral color processing circuit for processing the black object-oriented image data, the grey object-oriented image data, and the white object-oriented image data, whereby the image object's neutral object-oriented image data is processed separately [and may be rendered differently] from the object's non-neutral object-oriented image data.

4. (Thrice Amended) A method for processing object oriented image data, wherein object-oriented image data comprises image data pertaining to an image object,, comprising:

(a) parsing the object oriented image data into non-neutral object-oriented image data and object-oriented neutral image data;

(b) parsing the neutral object-oriented image data into black object-oriented image data, grey object-oriented image data, and object-oriented white image data;

(c) processing the black object-oriented image data, the object-oriented grey image data, and the white object-oriented image data separately from the non-neutral object-oriented image data; and

(d) processing the processed object-oriented black image data, the processed object-oriented grey image data, the processed object-oriented white image data, and the non-neutral object-oriented image data together[, whereby the image object's neutral object-oriented image data may be rendered differently from the object's non-neutral object-oriented image data].

Claims 6, 7 and 10 have been canceled.